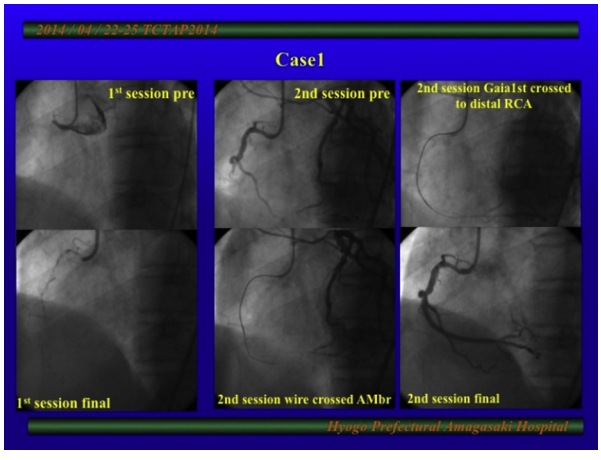
[Case2] Chest X-ray was unremarkable. ECG showed slight ST elevation and Q waves in inferior leads. Decreased motion at inferior wall was detected by echocardiogram. Slight elevation of cardiac enzyme (CK-MB = 30 IU / L) was observed.
Relevant catheterization findings:
[Case1]

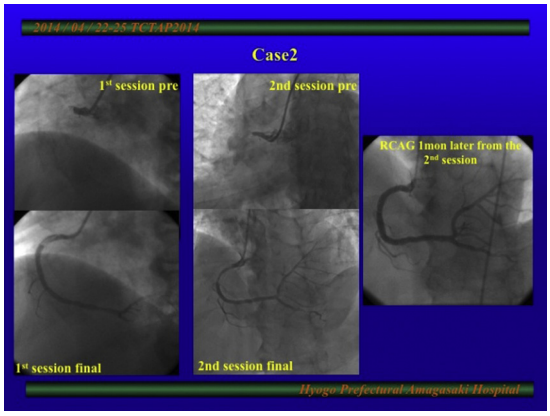
1. A right coronary angiogram showed total occlusion with thrombi at Seg1.
2. A left coronary angiogram showed no significant stenosis. Rentrop score grade2 collateral flow to RCA was observed.

[Case2]

- A right coronary angiogram showed total occlusion with thrombi at Seg1.
- A left coronary angiogram showed moderate stenosis at mid-LAD and high lateral branch. Rentrop score grade2 collateral flow to RCA was observed.

[Interventional Management]
Procedural step:
[Case1]
Primary PCI was performed under 330mg aspirin and 300mg clopidogrel administration. ACT was controlled over 300 seconds with using heparin. Right coronary artery (RCA) was engaged with 7Fr FR4 guiding catheter with side holes. Initially, by using the FinecrossGT microcatheter, Sion blue was tried to cross distal RCA but failed. Guide wire was exchanged to Wizard1 and failed to cross distal RCA but negotiated to acute marginal branch. After thrombus aspiration, large amount of thrombi were observed by coronary angiogram. We abandoned to obtain antegrade RCA recanalization in this session for fear of distal embolism. We kept APTT over 50 seconds with using heparin after procedure and performed 2nd session one week later. We found the reduction of thrombi from the control RCA angiogram. In this session, by using Corsair microcatheter, Gaia 1st was successfully negotiated to distal RCA. Although thromboembolism occurred between the procedure, two DES was deployed and finally we obtained complete TIMI3 flow with using thrombus aspiration catheter.
[Case2]
Primary PCI was performed under 330mg aspirin and 300mg clopidogrel administration. ACT was controlled over 300 seconds with using heparin. Right coronary artery (RCA) was engaged with 7Fr JR4 guiding catheter with side holes. By using FinecrossMG microcatheter, Sion blue was easily crossed to distal RCA. After thrombus aspiration, TIMI2 flow was obtained and severe stenosis at Seg3 was observed. Large amount of thrombi were seemed by IVUS in Seg1 to 2. Direct DES stenting was done to Seg3 lesion and we put the 5mm Filtrap distal protection device at Seg3. After distal protection, we performed balloon dilation with LacrosseNSE 3.5 sized balloon and thrombus aspiration with Dio but failed to retrieve thrombi. To crush the thrombi and get enough lumen area, we deployed BMS (Multi Link 8 4.0*23 mm) to Seg1. After stenting, migration of thrombi to ostial RCA was observed. For fear of systemic thromboembolism, we deeply engaged the guiding catheter and pushed the thrombus to the stented area. After that, we performed balloon dilation with LacrosseNSE 3.5 sized balloon and thrombus aspiration with Dio over and over but failed to retrieve the thrombi. We abandoned perfect retrieval of thrombi and finished this session by TIMI2 flow. We tried to keep APTT over 50 seconds with using heparin but failed. 50000IU heparin per day was necessary to achieve this goal and three days was passed with low APTT. We performed RCA angiogram 9 days later and it showed total occlusion at Seg 1. We went on to perform re-PCI to RCA. By using Corsair microcatheter, Ultimate bros3 was successfully negotiated to distal RCA. Balloon dilation with Core Through 2.5 sized balloon was performed and distal protection with 5mm Filtrap was done. After distal protection, balloon dilation with LacrosseNSE 3.5 sized balloon and thrombus aspiration with Dio was performed. Some thrombi were retrieved by this procedure but failed complete retrieval of thrombi. Large amount of thrombi was observed by OCT. We could not get procedure success at 2nd session either. After 2nd session, we kept APTT over 50 seconds with using high dose heparin and started warfarin administration. RCA angiogram was performed 1month later from the 2nd session and disappearance of thrombi was observed.





Case Summary:
In these two cases, we did not need complete recanalization to avoid ischemic myocardial damage because there existed collateral flow from contralateral coronary. Although we succeeded to reduce the amount of thrombi in case1, total occlusion of culprit segment was occurred in case2. There were some options to get better result such as thrombolysis therapy or stent in stent strategy. It was very difficult to determine end point of the session.

Bifurcation and Left Main Stenting (TCTAP C-039 to TCTAP C-076)

TCTAP C-039

Coronary Aneurysm Post LM PCI: Why?

Shiv Bagga
Post Graduate Institute of Medical Education & Research, India

[Clinical Information]
Patient initials or identifier number:
SD
Relevant clinical history and physical exam:
50 y/o Female, Htn, CAD ACS AWNSTEMI
Relevant test results prior to catheterization:
2D Echo: RWMA LAD, LVEF 45%
Relevant catheterization findings:
Ostail LAD 90% eccentric stenosis, Right dominant circulation
[Interventional Management]
Procedural step:
Taken for PCI to ostial LAD. Due to anticipated plaque shift to LCX in view of unfavourable angle b/w LAD and LCX, decided for extented stenting of LM for ostial LAD stenosis using a provisional bifucation strategy.
LCA hooked with EBU 3.0 7F Guide. Lesion in Ostial to Prox LAD predilated with 2.5x15 mm PTCA balloon. Subsequently, LM to LAD stenting (cross over technique) done with Endeavor 4.0x24 mm stent. Proximal stent in LM post dilated with 4.5x13 mm Powerail NC balloon. Post PCI no significant plaque or carina shift to LCX. Procedure finished without final kissing balloon strategy.
Case Summary:
10 months post procedure, patient presented with new onset AOE CCS 2 symptoms. Reluctant for, check angiography. CT coronary angio revealed diffuse ISR of LAD stent with a suspicion of coronary aneurysm. Conventional coronary angiography revealed a diffuse ISR of LM to LAD stent with a large coronary aneurysm in vicinity of LM bifurcation. Patient underwent successful CABG with LIMA graft to LAD and RSVG to OM. Has been MACE free on subsequent F/U.
The case highlights the rare complication of DES PCI i.e coronary artery aneurysm and the plausible mechanism for this complication in this particular case.

TCTAP C-040

Culottes Technique with Assistance of Balloon Cushion to Protect Left Anterior Descending Artery During Treatment of Left Main Distal Ttrifurcation like Stenosis

Shih-Hung Chan
National Cheng Kung University Medical Center, Taiwan

[Clinical Information]
Patient initials or identifier number:
Sheng-Tsai Zheng